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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,043	05/25/2005	Yasuhiro Miki	82478-8900	8869
21611 7590 10/04/2007 SNELL & WILMER LLP (OC) 600 ANTON BOULEVARD SUITE 1400 COSTA MESA, CA 92626			EXAMINER LE, TUAN H	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 10/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/507,043

**Applicant(s)**

MIKI ET AL.

**Examiner**

Tuan H. Le

**Art Unit**

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,3,5,7,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3,5,7,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

**Claim 10** is objected to because of the following informalities:

Regarding **claim 10** line 9, "the formation" should be changed to "the image formation" and "outputting of" should be changed to "outputting".

Regarding **claim 10** line 10, "and to enable" should be changed to "to enable".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claim 10** recites the limitation "storing multiple image data" in line 5. There is insufficient antecedent basis for this limitation in the claim.

**Claim 10** recites the limitation "storing single image data" in line 6. There is insufficient antecedent basis for this limitation in the claim.

**Claim 10** recites the limitation "a combination of image data from the pair of graphic memories" in line 11-12. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 2622

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

**Claim 9** is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 9 defines a program embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed program can range from paper on which the program is written, to a program simply contemplated and memorized by a person.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 2, 3, 5, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Lanier (U.S. Pat. 6,400,374).**

Regarding **claim 2**, Lanier discloses a photographed image display device (Lanier, Fig. 5) comprising:

a first LCD module (85 and 93) and a second LCD module (105 and 115) which each include a graphic memory operable to store image data and an LCD operable to display an image based on the image data stored in the graphic memory (Lanier, Fig. 5, wherein monitors 83 and 115 are connected to PCs 93 and 105; it is inherent that PCs have graphic memories used for display);

a photographing unit (video camera 86) operable to form an optical image of an object, convert the formed optical image into image data, and output the image data sequentially (Lanier, Fig. 5);

a first transfer unit (video in 91) operable to receive the image data output from the photographing unit (video camera 86) and transfer the image data to the graphic

memory in the first LCD module (Lanier, Fig. 5, wherein video in 91 transfers image data from video camera 86 to video out 90 for displaying);

a storage medium (inherent part) prestoring frame image data (Avatar 81')  
(Lanier, Fig. 5 and column 10 lines 3-8, wherein avatar 81' is prestored);

a judging unit (PC 93 and video control 92) operable to judge whether the transfer of the image data from the first transfer unit to the graphic memory in the first LCD module has been completed (Lanier, Fig. 5, wherein it is inherent that PC 93 checks for completion of image data from video camera before display); and

a second transfer unit (PC 93, video control 107, tcp/ip 95, and 10 Base T 96) operable to, when the transfer has been completed, read the image data (user 81) from the graphic memory in the first LCD module (PC 105 and monitor 115), combine the read image data (user 81) and the frame image data (avatar 81') so as to generate composite image data (81 and 81'), and transfer the composite image data to the graphic memory in the second LCD module (PC 105 and monitor 115), (Lanier, Fig. 5 and column 10 lines 3-9, wherein parts of composite image data are transferred).

Regarding **claim 3**, Lanier discloses the photographed image display device of claim 2. In addition, Lanier discloses

a storage instruction receiving unit (inherent part of PC 105) operable to receive a storage instruction to store the composite image data into the storage medium (Lanier, Fig. 5, wherein PC 105 has an interface for saving data); and

a storing unit (inherent part of PC 105) operable to store the composite image data into the storage medium according to the storage instruction (Lanier, Fig.5, wherein PC 105 has a storage medium for storing received composite image data).

Regarding **claim 5**, same ground of rejection as in claim 2 is applied.

Regarding **claim 9**, Lanier discloses a photographed image display program (Lanier, Fig. 5, column 9 lines 56-67 and column 10 lines 1-21, wherein PC 93 controls photographing, carries out edge contrast determination algorithm, and transfers composite image data, therefore it is inherent that program for such performance exists) used for a photographed image display device including (i) a first LCD module (85 and 93) and a second LCD module (105 and 115) which each include a graphic memory for temporarily storing image data and an LCD for displaying the image data (Lanier, Fig. 5, wherein monitors 83 and 115 are connected to PCs 93 and 105; it is inherent that PCs have graphic memories used for display), and (ii) a storage medium (inherent part) prestoring frame image data (Avatar 81') (Lanier, Fig. 5 and column 10 lines 3-8, wherein avatar 81' is prestored), the photographed image display program comprising:

a photographing step (by video camera 86) forming an optical image of an object, converting the formed optical image into image data, and outputting the image data sequentially (Lanier, Fig. 5);

a first transfer step (by video in 91) receiving the image data output in the photographing step (by video camera 86) and transferring the image data to the graphic

memory in the first LCD module (Lanier, Fig. 5, wherein video in 91 transfers image data from video camera 86 to video out 90 for displaying);

a judging step (by PC 93 and video control 92) of judging whether the transfer of the image data to the graphic memory in the first LCD module has been completed (Lanier, Fig. 5, wherein it is inherent that PC 93 checks for completion of image data from video camera before display); and

a second transfer step (by PC 93, video control 107, tcp/ip 95, and 10 Base T 96) of reading the image data (user 81) from the graphic memory in the first LCD module (PC 105 and monitor 115), combining the read image data (user 81) and the frame image data (avatar 81') so as to generate composite image data (81 and 81'), and transferring the composite image data to the graphic memory in the second LCD module (PC 105 and monitor 115), (Lanier, Fig. 5 and column 10 lines 3-9, wherein parts of composite image data are transferred).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lanier (U.S. Pat. 6,400,374) in view of Ohmura et al (U.S. Pub. 2001/0055983).**



Regarding **claim 7**, Lanier discloses a photographed image display device (Lanier, Fig. 5) comprising:

a first LCD module (85 and 93) and a second LCD module (105 and 115) which each include a graphic memory operable to store image data and an LCD operable to display an image based on the image data stored in the graphic memory (Lanier, Fig. 5, wherein monitors 83 and 115 are connected to PCs 93 and 105; it is inherent that PCs have graphic memories used for display);

a photographing unit (video camera 86) operable to form an optical image of an object, convert the formed optical image into image data, and output the image data sequentially (Lanier, Fig. 5);

a first transfer unit (video in 91) operable to receive the image data output from the photographing unit (video camera 86) and transfer the image data to the graphic memory in the first LCD module (Lanier, Fig. 5, wherein video in 91 transfers image data from video camera 86 to video out 90 for displaying);

a storage medium (inherent part) prestoring frame image data (Avatar 81') (Lanier, Fig. 5 and column 10 lines 3-8, wherein avatar 81' is prestored);

a judging unit (PC 93 and video control 92) operable to judge whether the transfer of the image data from the first transfer unit to the graphic memory in the first LCD module has been completed (Lanier, Fig. 5, wherein it is inherent that PC 93 checks for completion of image data from video camera before display); and

a second transfer unit (PC 93, video control 107, tcp/ip 95, and 10 Base T 96) operable to, when the transfer has been completed, read the image data (user 81) from the graphic memory in the first LCD module (PC 105 and monitor 115) , combine the read image data (user 81) and the frame image data (avatar 81') so as to generate composite image data (81 and 81'), and transfer the composite image data to the graphic memory in the second LCD module (PC 105 and monitor 115), (Lanier, Fig. 5 and column 10 lines 3-9, wherein parts of composite image data are transferred).

However, Lanier does not disclose a mobile telephone including the photographed image display device.

On the other hand, Ohmura et al discloses a cellular phone with two separate LCDs (Ohmura et al, Abstract and Figs. 8-9, wherein first LCD 331 and second LCD 332 are disclosed).

Therefore, it would have been obvious to an artisan to combine the photographed image display device as described by Lanier with the cellular phone as described by Ohmura et al in order to display data on two LCD modules because such combination eliminates usage of large display, resulting in power saving (Ohmura et al, paragraphs [0006] and [0007]).

Regarding **claim 10**, Lanier discloses a photographed image display device (Lanier, Fig. 5) comprising:

a camera unit (video camera 86) operable to form an optical image of an object, convert the formed optical image into image data, and output the image data (Lanier, Fig. 5);

a first storage assembly (inherent part of PC 93 and PC 105) including a storage unit for storing multiple image data and a pair of graphic memories each capable of storing single image data (Lanier, Fig. 5, wherein monitors 83 and 115 have graphic memories and PCs stores multiple image data);

a pair of LCD members (display 83 and 115) each capable of displaying image data from one of the graphic memories; and

a control unit (video control 92) for receiving an input instruction from a user to enable the camera unit to execute the formation and outputting of the image data to initially one of the graphic memories and subsequently for storage in the storage unit and to enable one of the LCD members to display image data from either one of the graphics memories or a combination of image data from the pair of graphic memories (Lanier, Fig. 5, wherein an user interacts with computer PC 92 for capturing an image and transferring image to display 83).

However, Lanier does not disclose a mobile telephone for receiving and transmitting audio and image data.

On the other hand, Ohmura et al discloses a cellular phone with two separate LCDs (Ohmura et al, Abstract and Figs. 8-9, wherein first LCD 331 and second LCD 332 are disclosed).

Therefore, it would have been obvious to an artisan to combine the photographed image display device as described by Lanier with the cellular phone as described by Ohmura et al in order to display data on two LCD modules in a mobile telephone because such combination eliminates usage of a large LCD display, resulting in power saving (Ohmura et al, paragraphs [0006] and [0007]).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gowda et al (U.S. Pat. 6,628,333).

Shiki et al (U.S. Pub. 2002/0149678).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Le whose telephone number is (571) 270-1130. The examiner can normally be reached on M-Th 7:30-5:00 F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan Le/

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal line extending to the right.

DAVID OMETZ  
SUPERVISORY PATENT EXAMINER